Notice of Allowability	Application No.	lication No. Applicant(s)	
	10/750,148	FANNING, BLAISE B.	
	Examiner	Art Unit	
	Lev I. Iwashko	2186	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHT of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate communication is s	this application. If not included unication will be mailed in due course. THIS	/e
2.  The allowed claim(s) is/are <u>7,9,11-13,15 and 17-29</u> .			
<ul> <li>3. Acknowledgment is made of a claim for foreign priority under a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have</li> <li>2. Certified copies of the priority documents have</li> <li>3. Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> </ul>	been received. been received in Application	n No	
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. A SUBSTITUTE OATH OR DECLARATION must be subm	IENT of this application.		
INFORMAL PATENT APPLICATION (PTO-152) which give			
5. $\square$ CORRECTED DRAWINGS ( as "replacement sheets") must	st be submitted.		
(a) including changes required by the Notice of Draftspers	on's Patent Drawing Review	v ( PTO-948) attached	
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date			
(b) including changes required by the attached Examiner's Paper No./Mail Date			
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5 ☐ Notice of In	formal Patent Application (PTO-152)	
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)		ummary (PTO-413),	
3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0	Paper No.	Mail Date Amendment/Comment	
Paper No./Mail Date <u>4/27/2006</u> 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner's 9. □ Other	Statement of Reasons for Allowance	

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## **DETAILED ACTION**

# Response to Amendment

- 1. The amendments made to Claims 7, 9, 11-13, 15 and 17-29 have been considered.
- 2. The cancellations of Claims 1-6, 10 and 16 have been noted.
- 3. Claims 7, 9, 11-13, 15 and 19-29 are now found to be in allowable condition.
- 4. Examiner shall make amendments to Claims 17-18 to put them in condition for allowance.

### **EXAMINER'S AMENDMENT**

- 5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- 6. Authorization for this examiner's amendment was given in an informal telephone conversation with Mark Van Ness on 6/19/2005.
  - Claim 17. (AMENDED) The system of claim 13, wherein the processor is to

    dynamically eliminate the second cache memory may be dynamically ereated or eliminated sector.
  - Claim 18. (AMENDED) The system of claim 13, wherein processor is to

    dynamically change the size of the second cache memory sector may be

    dynamically modified sector.

## Allowable Subject Matter

7. Claim 7, 9, 11-13, 15 and 17-29 are allowed.

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8. The following are the examiner's statements of reasons for allowance: Independent Claim 7 has been amended to specifically outline the functionality of the processor in the claimed invention. The processor is utilized in this invention in a step-by-step manner, which contributes to the inventions originality. The processor is sanctioned to evaluate the cache memory when a first process' association with a thread results in a cache operation for the cache memory. A determination is made whether a dedicated cache exists for the associated thread. The processor further determines is a dedicated cache is necessary if the dedicated cache does not in fact exist. The processor further creates a dedicated sector in cache memory if there is no existing dedicated cache, denoting a first sector for general operation and a second sector for the thread. It is the combination of all these elements, their interdependence and combined functionality that contributes to this invention's novelty. While prior inventions have scanned caches for determination of a dedicated cache, this invention further evaluates whether the dedicated cache is needed and resolves a possible situation where the dedicated cache is unnecessary. Therefore, Claim 7 is in condition for allowance.

- 9. Independent Claims 13, 20, and 25 all relate in purpose and functionality to Claim 7. The only differences are that Claim 7 describes the processor, Claim 13 describes a system, Claim 20 describes a method, and Claim 25 describes a machine-readable medium. Therefore, independent Claims 13, 20, and 25 are in condition for allowance.
- 10. Dependent Claims 8-9, 11-12, 14-15, 17-19, 21-24, and 26-29 are all in condition for allowance based on the allowable independent claims 7, 13, 20, and 25, upon which the aforementioned claims rely.

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11. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lev I. Iwashko whose telephone number is (571)272-1658. The examiner can normally be reached on 9 Hours Schedule), from 8-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (571)272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lev Iwashko

MATTHEW KIM
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